Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

Claims 1-6 (canceled)

7. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising zinc oxide in a molar ratio with the basic material of 3% to 50% zinc oxide.

8. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising titanium oxide in a molar ratio with the basic material of 10% to 98% titanium oxide.

9. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising magnesium oxide in a molar ratio with the basic material of 3% to 45% magnesium oxide.

10. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising yttrium oxide in a molar ratio with the basic material of 10% to 80% yttrium oxide.

11. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising gallium nitride in a molar ratio with the basic material of 1% to 30% gallium nitride.

12. (currently amended) A protection layer for a phase variation type data recording medium including a phase variation type recording layer substantially constituted by Ag, In, Sb and Te, the protection layer comprising:

SiO_2 as a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a

bulk state, said compound comprising silicon nitride in a molar ratio with the basic material of 10% to 85% silicon nitride,

wherein said thermal conductivity of said protection layer allows amorphous portions to be recorded in said recording layer through heating followed by rapid cooling, while protecting other portions of said recording layer from heating during said recording to said amorphous portions.

13. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising aluminum nitride in a molar ratio with the basic material of 1% to 50% aluminum nitride.

14. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising a silicon carbide in a molar ratio with the basic material of 5% to 50% silicon carbide.

15. (withdrawn) A protection layer for a data recording medium, the protection layer comprising:

a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising a titanium carbide in a molar ratio with the basic material of 10% to 85% titanium carbide.

16. (currently amended) A protection layer for a phase variation type data recording medium including a phase variation type recording layer substantially constituted by Ag, In, Sb and Te, the protection layer comprising:

SiO_2 as a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, said compound comprising one or more of the compounds selected from the group consisting of:

zinc oxide in a molar ratio with the basic material of 3% to 50% zinc oxide,

titanium oxide in a molar ratio with the basic material of 10% to 98% titanium oxide,

magnesium oxide in a molar ratio with the basic material of 3% to 45% magnesium oxide,

yttrium oxide in a molar ratio with the basic material of 10% to 80% yttrium oxide,

gallium nitride in a molar ratio with the basic material of 1% to 30% gallium nitride,

silicon nitride in a molar ratio with the basic material of 10% to 85% silicon nitride,

aluminum nitride in a molar ratio with the basic material of 1% to 50% aluminum nitride,

silicon carbide in a molar ratio with the basic material of 5% to 50% silicon carbide, and

titanium carbide in a molar ratio with the basic material of 10% to 85% titanium carbide, wherein said thermal conductivity of said protection layer allows amorphous portions to

be recorded in said recording layer through heating followed by rapid cooling, while protecting other portions of said recording layer from heating during said recording to said amorphous portions.

17. (previously presented) A protection layer as claimed in claim 12, wherein the compound includes a combination of the silicon nitride and zinc oxide, aluminum oxide, titanium oxide, magnesium oxide, yttrium oxide, gallium nitride, aluminum nitride, and/or silicon carbide.

18. (previously presented) A protection layer as claimed in claim 12, wherein the protection layer is adapted for use with the phase variation type data recording layer in an EFM modulation type recording system.

19. (previously presented) A protection layer as claimed in claim 12, wherein the protection layer is adapted for use with a recording mechanism which uses melting and rapid cooling of the phase variation type data recording layer.

20. (previously presented) A protection layer as claimed in claim 16, wherein the protection layer is adapted for use with the phase variation type data recording layer in an EFM modulation type recording system.

21. (previously presented) A protection layer as claimed in claim 16, wherein the protection layer is adapted for use with a recording mechanism which uses melting and rapid cooling of the phase variation type data recording layer.